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|---|------------------------|------------------------------------|
| <b>DECLARATION UNDER<br/>37 C.F.R. §1.131</b><br><br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, VA 22313-1450 | Application Number     | 09/775,163                         |
|   | Attorney Docket Number | 10010011-1                         |
|   | Filing Date            | January 31, 2001                   |
|   | First Named Inventor   | Herbert F. Cattell                 |
|   | Examiner               | Lori Clow                          |
|   | Group Art              | 1631                               |
|   | Title                  | <i>Reading Chemical<br/>Arrays</i> |

This Declaration and the attached Exhibit are being submitted in conjunction with the Applicants' Response to the Office Action dated March 7, 2005.

I, Herbert Cattell, do hereby declare as follows.

1. I am the inventor of the invention claimed in the above captioned application.
2. I have been asked to declare and provide factual evidence in support of conception of reading chemical arrays' design before November 2000.
3. As evidenced by Exhibit A, I conceived of the systems and methods for gene-based array design prior to November 2000. The dates have been redacted from Exhibit A. A redacted date showing an original prototype is prior to November 2000.
4. Exhibit A consists of a photocopy of the Invention Disclosure (total of 2 pages) in which details of the apparatus and the methods for reading an addressable array are described.
5. Pages 1 and 2 of Exhibit A are internal Invention Disclosure forms used by the Legal Department of Agilent Technologies. Section D, of Exhibit A, describes the details of the apparatus and methods for using the apparatus. In brief, an apparatus and method for reading an addressable array are set forth. This invention allows for the quick review of feature extraction results.

6. The evidence provided in Exhibit A establishes that I conceived the design for Reading Chemical Arrays prior to November 2000.

7. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 5/25/2005

Herbert F. Cattell

Herbert Cattell

Attachments: Exhibit A



Agilent Technologies

INVENTION DISCLOSURE

PAGE ONE OF TWO

PDNO 10010011

DATE RCVD

ATTORNEY

Gordon Stewart / BRSL

**Instructions:** The information contained in this document is **COMPANY CONFIDENTIAL** and may not be disclosed to others without prior authorization. Submit this disclosure to the Agilent Technologies Legal Department as soon as possible. No patent protection is possible until a patent application is authorized, prepared, and submitted to the Government.

**Descriptive Title of Invention:**

Saving feature extraction visual results for instant reloading.

**Name of Project:** PAMELA

**Product Name or Number:** Feature Extraction

Was a description of the invention published, or are you planning to publish? If so, the date(s) and publication(s): No

Was a product including the invention announced, offered for sale, sold, or is such activity proposed? If so, the date(s) and location(s): No

Was the invention disclosed to anyone outside of AGILENT TECHNOLOGIES, or will such disclosure occur? If so, the date(s) and name(s): No

*If any of the above situations will occur within 3 months, call your IP attorney or the Legal Department now at 1-553-3061 or 408-553-3061.*

Was the invention described in a lab book or other record? If so, please identify (lab book #, etc.) No

Was the invention built or tested? If so, the date: Yes. It was originally prototyped on or about :

A working version should be

released internally and to TAP customers in the next few weeks.

Was this invention made under a government contract? If so, the agency and contract number: No

**D. Description of Invention:**

To support high through put feature extraction, it is important to be able to quickly review feature extraction results. Current off the shelf and custom software save the feature extraction results to databases, binary files, or tabbed text. They do not store the visual results; they have no need because their software is interactive and you can review it before saving the results. To quickly review the results of a whole carousel of feature extracted data, it takes too long to regenerate feature-extracted data using the input parameters or the output files. The solution is to save the feature extraction visual data. This solution can be further enhanced by also saving links (feature number) to the output data. The visual data is saved by storing the definition of each shape drawn on the bitmap display of the image data. This is the same array of structures that are used internally to draw the feature extraction results. This results in very fast loading time that makes it feasible to review a whole carousel of feature extraction data.

**Signature of Inventor(s):** I (we) hereby submit this disclosure on this date:

| Employee No. | Name               | Signature                 | Telnet   | Mailstop | Entity & Lab Name |
|--------------|--------------------|---------------------------|----------|----------|-------------------|
| 490453       | Herbert F. Cattell | <i>Herbert F. Cattell</i> | 485-3121 | 25U      | CAD 2300          |

Exhibit A



**Signature of Witness(es):** (Please try to obtain the signature of the person(s) to whom invention was first disclosed.)

The invention was first explained to, and understood by, me (us) on this date: [November 01, 2000]

Full Name

Robert H. Kincaid

Signature

Robert Kincaid

Full Name

NICK SAMPAAS

Signature

Nick Sampaas

**Inventor & Home Address Information:** (If more than four inventors, include addl. information on a copy of this form & attach to this document)

**Inventor's Full Name**

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